The ABC of tourist attitudes towards wind industry in Skåne:

affective, behavioral and cognitive dimensions

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Abstract:

The expansion of Swedish wind energy grid has come at the cost of environmental, economic and social controversy, in which the issue of landscape quality change plays a prominent role. Tourism, an industry highly reliant on visual consumption of the landscape, is especially sensitive to this change. Scholars have repeatedly harvested evidences of a weak, but negative correlation between wind power development in the area and tourist attitudes, but seldom have scrutinized those attitudes in more depth in a qualitative study, concentrating primarily on quantification and estimation of potential financial losses. In my thesis, I employ a three-pillar framework of the attitude structure (cognition, affection and behavioral intentions) to determine what constitutes the attitudes of foreign visitors towards wind industry in the Swedish county of Skåne, as well as implications of this knowledge. The analysis of 61 semi-structured interviews and photo-simulation test have shown that people have been, for the most part, positive towards wind industry in the area and no one has claimed that it could change his or her intention to come. However, insights the visitors gave, have demonstrated that these positive attitudes were expressed towards wind power industry in general, rather than wind turbines in particular, which, on the other hand, were more often perceived with ambivalence or negatively – a stance known as Double Edged Visitor Attitude. The structure of the attitudes have mirrored this divide: to justify a positive predisposition towards wind industry people primarily resorted to reasoning, while talking about wind turbines in the vista they have concentrated on mixed feelings they provoke. The discussion of those feelings have revealed an information of potential interest for decision-makers and destination marketing organizations: (1) a few smaller turbines embedded in the changed landscapes, rural or urban, were perceived better, than bigger ones in the natural scenery or near historical sites, though up until certain saturation point; (2) wind turbines could be of interest to some, especially people unaccustomed to such a view, as a potential tourist destination.

Keywords: renewable energy, Skåne tourism, social psychology, behavior, feeling, reasoning.

Word count: 12 056

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Table of Contents

1 Introduction

Owing to its rich natural resources and effective polices Sweden currently ranks the third-highest among International Energy Agency member countries in terms of renewable energy share in its primary energy supply (49%; Statistics Sweden, 2015). The hydropower segment is the largest up to date (44.1% of electricity production), with biofuels, waste (8.5%; IEA, 2013) and wind (7,7%; Siyal et al., 2015) somewhat left behind. Pushed forward by its EU commitments (2009/28/EC), Sweden is aiming to fix the asymmetry and expand, *inter alia*, its wind energy grid by adding another 30 TWh worth of wind power (Rudberg et al., 2013; Sandén and Azar, 2005) to 11,5 TWh of its already existing capacities (Svensk Vindenergi, 2015).

This expansion comes at the cost of considerable environmental, economic and social controversy, where impacts on wildlife, property prices and landscape aesthetics remain at the heart of the debate (Bergek, 2010). And while the subject of biodiversity loss and real estate prices volatility is observable and available for scrutiny, the highly subjective and fuzzy notion of aesthetics is mainly examined through the lens of the tourism industry, which is believed to be highly reliant on visual consumption of the landscape (Broekel and Alfken, 2015).

Largely, researchers have found that visitors oppose wind turbines at their destination (see *Literature review*), and even used metaphors like “exoskeletal outer-space creations” (p.244, Righter, 1996) to denote this perception of strangeness and alienation some have reported to feel while visiting such “landscapes of power” (Pasqualetti et al., 2002). Conversely, tourists have claimed to have largely positive attitudes towards wind industry and support its development, but in the areas remote from potential recreational landscapes. This contradictory stance has been coined as DEVA – Double Edged Visitor Attitude (Shepherd, 2011).

Of course, tourist protest, if any, has always been a much milder form of opposition, in comparison to e.g. local resistance. At most, such visitors would refuse to revisit to the area, at least – simply report being unhappy about the wind turbines encounter (see *Literature Review*). It does not mean, however, that such an idle disapproval should stay neglected. Though it might not cost tourism industry much money, it remains an outlet for scientific inquiry, focusing on landscape attractiveness and wind turbines, which might interfere with it. No less a deeper understanding of it is capable to shed light onto motives for protest, as well as provide a basis for compromise.

2 Literature review

2. 1 Sustainable development, wind power and tourism

In order to draw connections between tourist perceptions of the wind power, investigated in this paper, and sustainable development, it is necessary to constextualize and clarify both from the start, especially since sustainable development, as a concept of a "universal appeal", is haunted by numerous interpretations and implicit connections drawn to almost any branch of environmental research.

As a framework, sustainable development has evolved from environmentalism movement that started in the early 60s, and was, to an extent, an attemt to reframe traditional ecologilcal problematics (Kolonas, 2007). Numerous organisations and colalitions have amassed more than 300 definitions of it combined (UNEP, 2006), but the most commonly known and popularised understanding of it eventually emerged from *Our Common Future*, also known as the *Brutland Report*, produced by the World Commission on Environment and Development in 1987. According to this report sustainable development should be defined as a "development, that meets the needs of the present without compromising future generations to meet their own needs" (Butlin, 1989). More of a common goal, rather than a defintion, it has, however, marked a paradigmal shift from tradidtional understanding of the development and environmentalism to a new concept embodying the three pillars of environmental, social and economic development (Kolonas, 2007). Economic aspect addresses growth of prosperity, maximizaion of profit, expantion of the market and similar targets. Environmental aspect presupposes safeguarding global systems carrying capacity by resource conservation, maintainence of biodiveristy, atmospheric stability and others. Social aspect – community development – addresses the issue of satisfaction of basic human needs, equity and accountability (Bell and Morse, 2003).

However, the proposed framework has never been stable. It has been critisised and challenged repeatedly regarding, for example, "commonsensial" character of it and too broad of a focus stipulated (Kolonas, 2007). The most relevant to my topic, though, is the problem of balancing the pillars out, which has already raised a plethora of questions on which aspects should be prioritised and when their interaction can be understood as successful (Harris et al., 2001). This citique has been getting increasingly more vocal as the expantion of the wind energy sector became more rapid and its support by the national and regional authorities of the EU countries more widespread (Kolonas, 2007).

Initially, the renewable energy sector, of which wind power is one of the many tools, served to reduce critical dependence on fossil fuels especially acute after the oil crisis 1973 (Ek et al., 2013). Fifteen years later, however, renewables have become inseparable from the sustainable development idea as

an industry capable of securing long-term energy supply without contributing further into the "greenhouse effect" amplified by increasing carbon dioxide and methane (greenhouse gases – GHG) concentrations in the atmosphere (Åstrand and Neij, 2006). The excessive emissions are almost unanimously recognized by the scientific community as an exhaust from fossil fuels burning, with energy supply sector being the largest offender (35% of total anthropogenic GHG emissions, according to Bruckner et al. (2014)). The outcome in case of inaction will be detrimental for Earth's systems and include average temperature increase, sea level rise and intensification of extreme weather conditions (IPCC, 2013).

In order to satisfy continuously growing demand and simultaneously ensure reduction of GHG emissions policy-makers have shifted their focus to the promotion of clean energy technologies and wind power industry in particular. Currently, the latter (together with solar energy sector) is, perhaps, "the most rapidly emerging technology, with the costs per MW produced being on a similar level as the ones of conventional power sources" (p.7, Kolonas, 2007). Apart from the primary aim of "greenhouse effect" mitigation, the overarching objectives of aforementioned technologies also include ensuring social prosperity, decent quality of life for all generations and ecosystems preservation (p. 31, UNDP, 2000). In addition, renewable energy is required to be developed in a "socially acceptable manner", where the issue of acceptance by local public is given enough prominence (Eltham et al., 2008).

Despite this optimistic vision, however, the implementation of wind power projects has not been as promising. While the regime for sustainable energy may have been created and wind power has been successful in advancing on the market, local development of it has been complicated and slower than expected (Kolonas, 2007). For example, a research done in Sweden has shown, that lead times for wind power project average out at five years, while throughout the EU they usually remain with the timeframe of 1.5-4.5 years (Söderholm and Pettersson, 2011). This delay could be in part attributed to the common implementation problems of a new environmental regime, such as overambitious targets, weak international agreements, lack of economic resources and absence of political will (Kolonas, 2007). Nevertheless, wind power certainly faces its own challenges, the most notorious of which was captured by Redlinger and colleagues in the following quote: "Wind power development may be a sound sustainable solution regarding the global environment, equity and policy planning, yet when it comes to local implementation the parameters that define such terms are different and they are set by the local communities" (p. 163, Redlinger et al., 2002). At that, environmental benefits are usually prioritized over social costs, resulting, ultimately, in conflict between the two (Kolonas, 2007). A well-known NIMBY – Not In My Backyard – attitude is often used to denote this clash, oscillating between

explanations focusing on physical aspects of the development and perceived, socially defined "fitness" of the projects to the site (Devine-Wright and Howes, 2010). While the former characteristics are straightforward and include wind power impact on biodiversity or real estate prices, the latter often captures a much more subtle notion of aesthetic change of vista. This change increasingly matters due to the rising importance of the visual consumption in judgement of landscapes (Urry, 1992), especially if these landscapes are viewed through the eyes of tourists, whose "romantic gaze" expects certain kinds of image for aesthetic appropriation (Rudberg et al., 2013).

Tourists are regarded as a grop distinct from the locals – "people in environments that are out of the everyday for them, [who] perceive and experience the surrounding world with different eyes, and want «to gaze on different landscapes and townscapes that are unusual for them»... Therefore, objects that residents might often find irritating could have an attraction to tourists" (p. 503, Frantál and Kunc, 2011). Nontheless, as the *Literature Review* will show, tourists report to be unhappy with renewable energy factilities (specifically, wind power projects) more often than pleased. Even though their aims are not the same as the aims of the locals they still demonstrate negativity and rejection. Some researchers claim that permanence of this rejection throughout different social groups only confirms the aforementioned socio-environmental tensions within the whole concept of sustainable development, which is tight closely to democratic acceptance of its principles (Carter, 2001).

In addition, tourists are often viewed as "transient stakeholders" (Kurani, 2015). They are not present at the area constantly, and, thus, excluded from the wind project discussion. At the same time, since tourists are everywhere and tourism have already become inseparable from modern lifestyle, locals have come to embrace it and exploit for monetary gain (Shepherd, 2011). As such, inability (or reluctance) to consult with visitors and learn their attitudes towards long term planning of the wind industry in the area is fraught with potential economic losses. Understanding what forms attitudes though, and, consequently, which patterns of behavior visitor tend to exhibit, could provide some guidance to decision-makers, who, though generally aware of the possible effects of the renewable energy facilities on the tourism industry in the area (Strachan and Lal, 2004), might not take into the account individual tourist opinions, which shape this industry.

2. 2 Tourist attitudes towards wind power

The existence of a weak but consistently negative correlation between wind power infrastructure development and tourism have been reported by the absolute majority of studies (8 out of 11 found

articles) (Bodén, 2009; Broekel and Alfken, 2015; Frantál and Kunc, 2011; Hörnsten, 2002; Landry et al., 2012; Lilley et al., 2010; Riddington et al., 2010; Shepherd, 2011). Many of those studies were done in countries like the United Kingdom, Scotland in particular, where tourism depends heavily on country's close-to-nature or 'wilderness' landscape (Riddington et al., 2010).

In Germany tourists were shown to avoid destinations exposed to wind turbines to the point where municipalities associated with an extensive wind industry development experienced certain decline in visitations (Broekel and Alfken, 2015). Relevant literature from the US, primarily studies of the offshore wind turbine installation and its impact on the tourist experience and site choice, have also observed negativity and ambivalence in people's opinions: tourists do not wish to see turbines too close to the coast, but admit their positive role as a source of renewable energy (Landry et al., 2012; Lilley et al., 2010). Researchers from Nordic countries, such as Sweden and Norway, have also reported an ambivalence in sentiment, e.g. equal number of positive and negative attitudes recorded (Heiberg et al., 2009; Hörnsten, 2002), and predicted adverse economic effects on tourism, manageable in a short term, but shown to cumulate over time (Bodén, 2009).

A study that stated more or less univocally the overall positive attitude towards wind turbines was done for a historic village in Portugal (de Sousa and Kastenholz, 2015). The majority of other papers, for one exception (Frantál and Kunc, 2011), were either focusing on more or less "untouched" scenery, such as mountainous areas of Swedish Jämtland (Bodén, 2009) and coastal zone of Norway (Heiberg et al., 2009), or conducting all-encompassing studies across the whole countries (Broekel and Alfken, 2015) repeatedly harvesting ambivalent and negative responses. Whether the settings (urban and rural vs. natural) indeed play a role was investigated by Wolsink (2007a), who confirmed that people tend to be more approving of wind turbines embedded in already changed landscapes. A research from Czech areas suitable for wind power construction were in line with this conclusion: "already used agricultural areas are preferred (70%) to untouched virgin nature areas (5%)" (p. 511, Frantál and Kunc, 2011).

The primary tools of data collection employed in these studies were in-depth discussions, semi-structured interviews and surveys, including contingent valuation methods (cost-benefit analysis). In some cases, the researchers have been also adding visual stimulations – the pictures of the landscapes with wind turbines edited into them (Landry et al., 2012; Lilley et al., 2010). Such images are believed to be a valid approximation of the tourist vista, capable to evoke feelings similar to those experienced by people in a real landscape and make it possible to compare different settings (Jacobsen, 2007). Overall, people who underwent such a test have been shown to prefer images depicting as little wind turbines as possible as far away as possible (Molnarova et al., 2012).

In some instances, the researchers were trying to avoid surveys and uncertainties inherent in them (e.g. inability to verify whether the statements of intentions will result in future action) and gained advantage over secondary statistics approximating already made tourist choices, e.g. hotel occupancy. These studies had revealed a weak negative spatial correlation between past tourist activity and wind power facilities distribution (Broekel and Alfken, 2015; Riddington et al., 2010). These findings appeared to be in contradiction with cases, in which tourists declared the intention to come to the area regardless of whether or not wind power is being developed there (Aitchison, 2004; Frantál and Kunc, 2011; Lilley et al., 2010).

3 Research question and rationale

Overall, the above listed studies of the tourist attitudes towards wind turbines were concentrating primarily on quantifying those attitudes. Tools employed during data gathering stage were also tailored to collect stated preferences (polls, questionaries, interviews) or statistics of already made choices (GIS, secondary data), rather than investigate resasons or feelings that guided them (Riddington et al., 2010). At the same time, qualitative methods of analysis were seldom employed and usually did not follow a clearly defined analytical framework of attitudes analysis, presupposing mostly a finalizing discussion of the key issues repeatedly brought up during interviews as key factors triggering the establishment of negative (noise, diminished aesthetics, intermittence, avian mortality) and positive beliefs (low-carbon energy, new jobs) (Shepherd, 2011). A systematic approach similar to one I employ to trace different aspects of attitudes towards wind turbines – cognitive, affective and behavioral – have been used before (Waldo, 2012). Although Waldo harvested interesting results, for example, the discrepancies between the knowledge of local inhabitants and developers, the method have not been utilized to study tourist attitudes towards wind turbines.

In addition, the researchers so far were predominantly preoccupied by the opinions of nature-oriented tourists (Heiberg et al., 2009) or sweeping analysis for whole countries (Broekel and Alfken, 2015; Riddington et al., 2010). The successful attempts to establish whether people tend to be more tolerant towards wind power facilities placed in rural or urban settings were seldom undertaken and involved the use of photos (Molnarova et al., 2012) or, rarely, on-site studies (Frantál and Kunc, 2011). Thus, **Skåne** – a densely populated Swedish county with a high percentage of build-up lands (Moström, 2013), considerable tourist load (Tillväxtverkets, 2016) and quantity of wind turbines

(Svensk Vindenergi, 2015) – makes a suitable study area, appropriate for harvesting attitudes of the tourists interested in rural or urban settings.

Research aim
There is a definite demand for better understanding of **what constitutes the attitudes of foreign visitors towards wind industry and its facilities in the Swedish county of Skåne.**
Research questions
1. What are the attitudes of foreign visitors towards wind turbines? 2. Which components reported attitudes include? 3. How knowing those attitudes and their components might be important for sustainable development?

4 Three-pillar framework of the attitude studies

One of the most well-known empirical methods of the attitudes exploration was developed by Fishbein and Ajzen (1975) in their classic work *Belief, Attitude, Intention, and Behavior.* This method, however, was tailored for quantitative research, measuring the relative importance of different beliefs as attitudes determinants. My aim, however, is to identify *what* constitutes the attitudes, not to quantify them. For this I use a modified version of Fishbein and Ajzen's method where attitudes (***Figure 1***) – "learned predisposition to respond in a consistently favorable or unfavorable manner with respect to given object" (p.6, Fishbein and Ajzen, 1975) – are understood as a system of three components: *feelings* (affect), *knowledge* (cognition) and *conation* (behavior), founded on the individual's basic values (Fishbein and Ajzen, 1975; Waldo, 2012). Quoting Linden (1994), Waldo (2012) justifies the use of this method from sociological perspective as it allows to differentiate between values, attitudes and behavior; which "facilitates the study of those values [to] provide a base for the consistency between the individual's different attitudes. It also makes it possible to study the components of attitudes in specific and distinct situations. Finally, the actual behavior of the individual is clearly separated from the action tendency residing in the attitude, and this clarifies the important distinction between intended and performed behavior" (p. 693, Waldo, 2012). All of the three components are assumed to be positively correlated with each other (Kim and Stepchenkova, 2015).

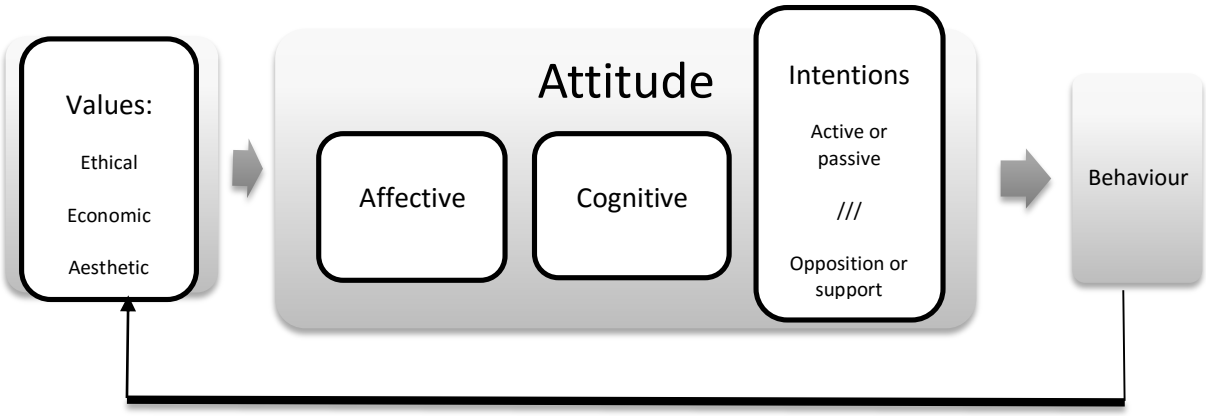

Figure 1. Model of the attitude by Fishbein and Ajzen (1975) and Waldo (2012).

The feeling component of an attitude judges objects or phenomena on the basis of whether or not an individual finds something pleasing or displeasing, likable or dislikable, "and it is this emotional charge that gives attitudes their motivating character" (p. 693, Waldo, 2012).

The cognitive (also sometimes called "opinion") component of an attitude is a function of a person's **beliefs –** the information a person has about the object and certain attributes (s)he assigns to it (Fishbein and Ajzen, 1975) – defining object as being "good or bad, desirable or undesirable, favorable or unfavorable" as well as "value-neutral, comprehensive and relevant" (p. 693, Waldo, 2012). Beliefs are important, since they are closely connected with **values** – principles or standards that emerge within established groups, reflecting these group's major life goals and general behavioral modes, thus, a base for object specific attitudes (Bergman, 1998). The values associated with attitudes towards wind power are believed to include aesthetic, material and ethical aspects (Waldo, 2012). Aesthetic dimension presupposes individual perception of beauty, which, in case of wind turbines presence and their negative perception, may provoke a feeling of disruption to place attachment, i.e. upsetting change (Devine-Wright and Howes, 2010) or, on the contrary, "elicit pleasure at seeing natural forces harnessed in this way" (p. 694, Waldo, 2012). Material values refer to what is seen as a decent level of living standards and that, in the context of wind power discussions, translates into expectations of economic benefits brought about by such development (as jobs or energy production) or, on the contrary, financial losses endured by tourism industry (Linden, 1994). Finally, *ethical* aspect shapes the understanding of what is right and wrong. Wind power from this standpoint could be judged as "environmentally friendly" and beneficial for the global system's health, but threatening bird, bats or fish populations locally (Waldo, 2012).

Though intention (behavioral) component is sometimes excluded from the notion of the attitude itself (Bergman, 1998), representing the readiness to act on the attitude (opposition or support, passivity or activity) (Waldo, 2012), rather than the behavior, here I still consider this contentious dimension as an predicate of a concrete action.

5 Methodology

5.1 Research design and epistemology

I have narrowed down a broad field of the attitudes study to the case of Skåne tourists and employed qualitative analysis to establish components that comprise expressed attitudes due to two main reasons. First of all, the case study design allowed me to scrutinize a complex attitude fabric of a limited number of people in a specific context. Secondly, such a study, since it describes a specific case, may be of importance to local stakeholders, though it might omit some of the associated cause and effect connections (see *Limitations* and *Future research* sections).

I treat my qualitative research as a positivistic inquiry, which considers attitudes, and cognition in general, as a phenomenon of observable world, governed through law-like regularities and manifested in behavior (Ritchie and Lewis, 2003). Attitudes could be sampled using strategies analogous to that of a natural science, while subsequent analysis will produce close-to-actual picture of the reality (Fishbein and Ajzen, 1975). Research in social psychology has widely applied Fishbein and Ajzen's attitude framework to understand and predict motivational influences on behavior in the past (Madden et al., 1992).

I intend to gather evidence to generate a conclusion without postulating any hypothesis primary to that. A single offered precondition – testing whether people tend to be more tolerant of wind turbines in rural or urban rather than in natural setting – is not central to my research and used to justify the choice of subjects and study area (culture tourists in Skåne) and highlight distinctions that make this particular case interesting.

In case of a social research, however, purely empirical stance is criticized for claimed objectivity and neutrality. Critiques argue that researcher inevitably influences (while also being influenced by) the subjects and his or her findings reflect this bias (Ritchie and Lewis, 2003). Striving to be as objective as possible, I took a particular care in data collection processes. For example, I did not give personal

opinions to my respondents, did not ask leading question and even tried to restrict extra body movements and gestures (nodding, smiling) etc. I have also tried to reflect as much as possible on potential omissions and mistakes (*Limitations sections*), as well as factors that make my research reliable and valid (*Validity, reliability and ethics of the research* section).

5.2 Validity, reliability and ethics of the research

The study has to comply with standard criteria of research quality.

1. **Validity**. Since my research questions are wired to inform me of a tourist's own "how", "what" and "why", semi-structured interviews that do not prompt an interviewee in any direction and allow me, as a researcher, remain open-minded, are deemed to be an appropriate instrument for this study (Kvale, 2008).
2. **Reliability**. In order to ensure that my method will harvest consistent results, I have administered a pilot stage of the data gathering (Bryman, 2012). It has allowed me to uncover problems such as poor wording or information scarcity. Later, I have revised my questions and added some new ones.
3. **Ethics**. Before undertaking each interview I have been asking tourist's permission to record their personal data (excluding names, to ensure anonymity) and use their answers in my analysis of the tourist attitudes towards wind power development in Skåne.

6 Methods

6.1 Data collection

Self-reports during face-to-face meetings – interviews – is a widely-accepted, most direct approach to collecting information on the attitudes (Simons and Maushak, 1996). For the most part it is so widespread due to its sensitivity and powerful ability to capture the lived experience of a subject (Kvale, 2008).

People interviewed were foreign tourists only, since gathering the attitudes of Swedes, even if they are Skåne tourists, would make it hard to justify later on the separation of their opinions from the opinions of the locals – people from the same socio-cultural context and living relatively close to the study area. Business travelers and those visiting friends were excluded from the sample, since in their case the choice of destination is predetermined by factors other than their own attitude to the area.

The size of my combined interview sample (45 people) was comparable to that of Waldo's (40 people), whose qualitative approach to the attitudes analysis I adopt to a large extent (Waldo, 2012), though the interviews in my study were shorter than hers.

As a data collection locale, I have chosen Tourist Bureaus (*Turistbyrån*) in two large cities of Skåne – Malmö and Lund – two places, where the probability to meet foreign tourists in this time of year was the highest. The second largest city of Skåne – Helsingborg – proved to be unsuitable, since its *Turistbyrå* was too remote and, at the time of my research, was not visited by a single foreign tourist.

To avoid sampling bias, all tourists, who entered the premises of a *Turistbyrån*, were asked to participate in the interview, the offer that some (around 10-15%) declined. Those, who agreed, were interviewed, on average, for 8 to 15 minutes. Regardless of how many people I was interviewing simultaneously, I still counted their answer as one, since several people giving answers together were very often influencing each other and prompting each other's responses. All of the interviews were transcribed on the same day after the session.

The thirds stage of the photo-simulation test (16 interviews) was added later and became an attempt to inspire tourists to communicate their attitudes in a new, possibly, refreshed manner. Scholars have studied attitudes towards wind turbines elicited by destination images before, concentrating primarily on surveys, mixed method approach and in combination with the analysis of textual data (Hörnsten, 2002; Lilley et al., 2010). However none, as far as I am aware, employed visual representations, such as photographs of wind turbines, in qualitative in-depth study of the attitudes as an extra stimulus. The strength of this approach is in limited interference of the researcher (only at the stage of pictures selection and editing) with the process of reasoning and elaboration, stimulated here only by visual clues. To an extent, photos are regarded as a valid surrogate for landscape studies, since 90 percent of peoples' perceptual intake is assumed to be visual (Jacobsen, 2007). This method, though, might be flawed with certain research design challenges, especially at the stage of photo-stimuli sampling (see *Limitations*).

I have conducted the interviews in three-stages, following the procedure below.

Stage 1.

22-23 of February. Pilot interviews to both gather the information and establish the procedure for interviewing were conducted in Lund *Turistbyrån*. I used a list of preliminary questions, but amended and corrected it during the dialogue to produce a concise and clear phrasing and structure to employ at the second stage. The information gathered included the following: demographics (country, age, gender, tourist interest), general attitudes towards wind farms and justification of the attitude from

both rational and affective dimensions. In total 17 people were interviewed and 16 interviews collected.

During this stage, I have directly asked questions that separated affective and cognitive components of the attitude: "what do you think about wind turbines at your destination?" and "how would you describe feelings evoked by wind turbines at your destination?". Nevertheless, I quickly learnt that if people have any sort of affective predisposition towards wind turbines in the area they would state so, otherwise, when prompted, they would simply reject the existence of a feeling component at all ("It's an industry! I do not have feelings towards industry!", as one of my respondents said). That is why I rephrased both questions and merged them into one (question num.1 below) and excluded the question concerning feelings from the analysis later on.

Stage 2.

26, 29 of February – 1 of March. At this stage I have used the finalized structure of the interview to question people at Malmö *Turistbyrån*. I did not deviate from the layout of the interview, giving everyone exactly the same three topics to elaborate on and avoiding nudging or adding any extra information. The structure largely repeated the structure of the interviews from the first stage and contained the following questions:

1) "Would you be for or against the presence of wind turbines at your destination and why?"
2) "Could wind turbines be the reasons for you to avoid leisure trips to Skåne?"
3) "Have you ever openly complained or opposed wind turbines construction or presence? If yes, why?".

The second question was asked in order to uncover the tourist intentions (the third component of the attitude) towards wind power landscapes, while the third – to compare and cross-check past actions with previously stated attitudes (Fishbein and Ajzen, 1975).

In total 39 people were interviewed at this stage and 29 interviews collected.

Stage 3.

4, 7-8 of March. By the end of the second stage I have noticed that tourists started to give repetitive answers (sample saturation stage (Mason, 2010)). In order to encourage people to elaborate more on the questions asked and check the importance of a landscape type (rural, urban, natural) for the attitude I have used a method of photo-simulation. Six photos of Skåne (***Appendix A***) published under Creative Commons Zero license (available for download free of charge) on Flickr, image and video hosting service (https://www.flickr.com/), were selected according to the spectrum of landscapes

more (industrial and harbor areas, agricultural landscapes) or less (sea, nature areas, sand dunes) suitable for wind turbines erection according to tourists (Molnarova et al., 2012). The images were searched for using the tag #Skåne.

Since using a photo alone it is impossible to tell the number of inhabitants in the area depicted – by far one of the most popular ways to distinguish between rural and urban locale – I have relied on two visual criteria in my choice of images: the number of human artifacts and their quality. The larger the number of the artifacts was, the more "urbanized" an image deemed to be. Similarly, tall, multi-storey buildings were more likely to represent a city rather than a village. Respectively, a photo showing land deprived of any artifacts was considered "natural". I have selected the two photos of each landscape type to keep the number of photos to minimum and appropriate for sorting, but still maintain the diversity in images of rural, urban, natural setting. The choice of at least two pictures was given to decrease the possibility of error, if, for example, a photo deemed by me as "urban" would be considered by my respondents as "rural".

Using Photoshop CC software I have added wind turbines in all of the photos (with rotor blades occupying a comparable area in each image) and these changed images have been presented to the tourists along with original ones (***Appendix B***). The requests included arranging original photos in three groups according to their scenic values, rating photos with turbines according to 3 point grading scale (improvement, no significant change, deterioration), justification of the choice. The rest of the questions were analogous to those from the semi-structured interviews phase and included demographics and reporting on intentions and past actions. In total 22 people were interviewed and 16 interviews collected.

6.2 Analysis tool

To establish a context for my studies and illustrate who my respondents were, I have summarized such characteristics as gender, nationality, age and tourist interests in the beginning of the each section: *Interviews Results* and *Photo Simulation Test Results*.

To uncover "the role of reasoning and feelings in the tourist attitudes towards wind turbines" presumably captured in the course of the interviews, I have used a method tailored to aid in identifying reemerging concepts without imposing previously existing perceptions of my own and those of other scholars (Charmaz, 2006). This method is very efficient in structuring the piling up increments of data and preparing them for further analytic interpretation via:

1) **Initial coding** – assigning keywords to each sentence of an interview to identify preliminary analytic categories;
2) **Focused coding –** selecting frequent and significant initial codes to synthesize the data and draw conclusions from it.

Just like Waldo (2012) I have arranged initial codes into two large groups – cognitive and affective – mirroring the structure of the attitude concept I employ (Fishbein and Ajzen, 1975). The third component – intentions – has not been analyzed in such a detail, since people's reflections on it required only "yes or no" answers, summarizing the talk they gave previously.

Both cognitive and affective components were further broken down into values associated with them – aesthetic, material and ethic – in order to have a glimpse into the deeper layers of the attitudes embedded in group beliefs (Waldo, 2012).

7 Results

Information on demographics and tourist attitudes towards wind turbines, as well as reflections on these attitudes, were gathered during both first and second stages of the data sampling. Since this information was collected in a similar manner both times, it was deemed possible to combine these two samples to produce a single dataset. The third stage was qualitatively different and analyzed separately.

7.1 Interviews

7.1.1 Sample description

In total 56 people were interviewed during the first two stages of the data gathering and 45 interviews collected. Altogether, 26 men and 30 women have participated in the study, which was close to a 50/50 per cent gender split within the sample. Respondents came from 21 different countries with nearly a third being from the USA or Spain (***Figure* 2**). Average age of the tourists was 32, but almost a half (22 out of 45) were individuals between 20 and 27.

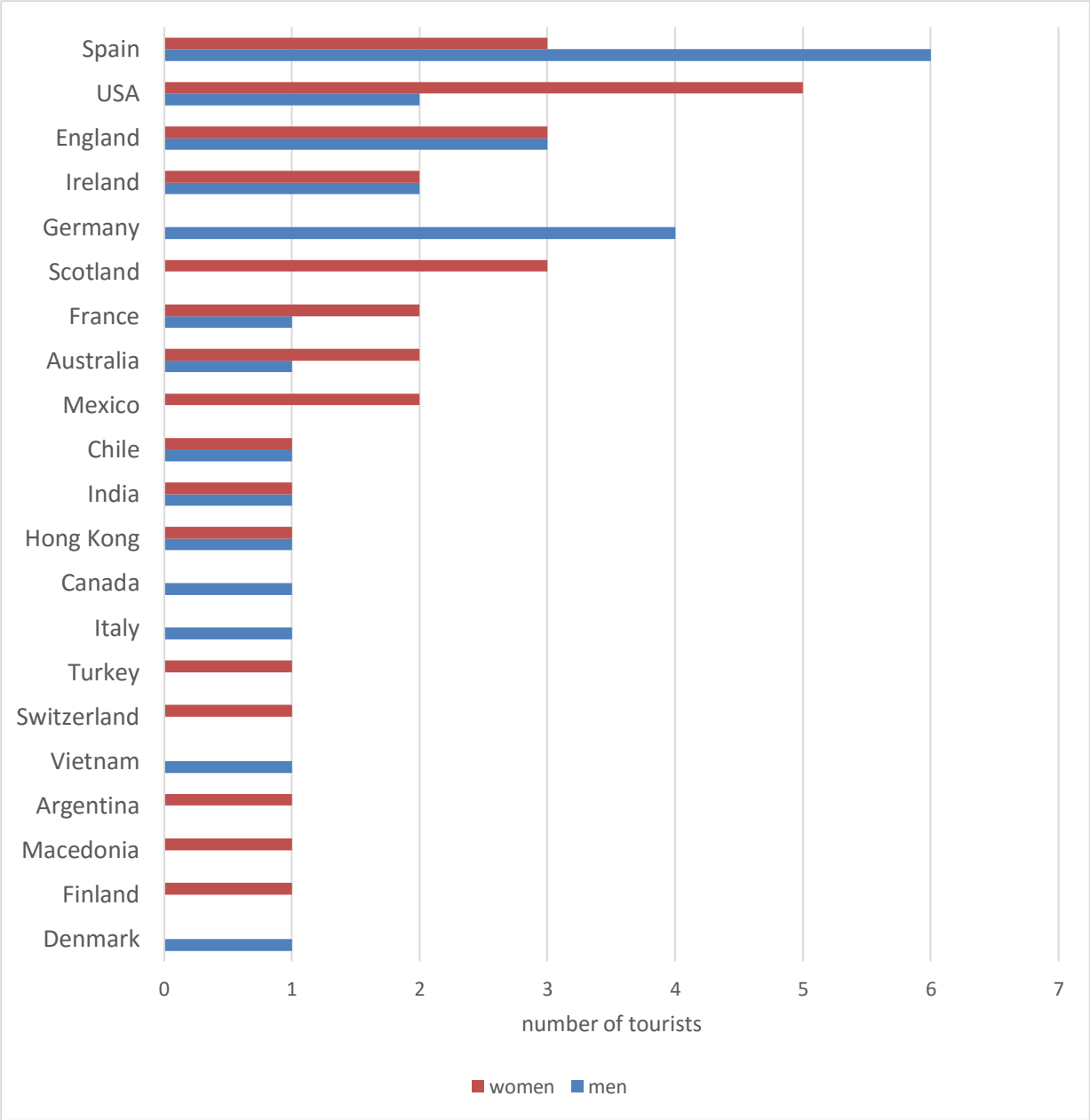

Figure 2. Nationality of the respondents and their gender.

The absolute majority of people have stated that the purpose of their trip was to see a Swedish city (29 people). Some specified that they wanted to experience local culture and meet people (3), see unique architecture (15) or learn about the history of a place (13). Only five tourists have answered that they are more interested in visiting a natural park or a seaside. Thus, my sample conforms to the aim of my research and consists primarily of tourists interested in socio-cultural aspects of the destination, rather than natural beauty.

The absolute majority (33 out of 45) of people have reported being positive towards wind turbines found at their destination, 11 said that they are indifferent and only one expressed a negative attitude (***Figure 3***).

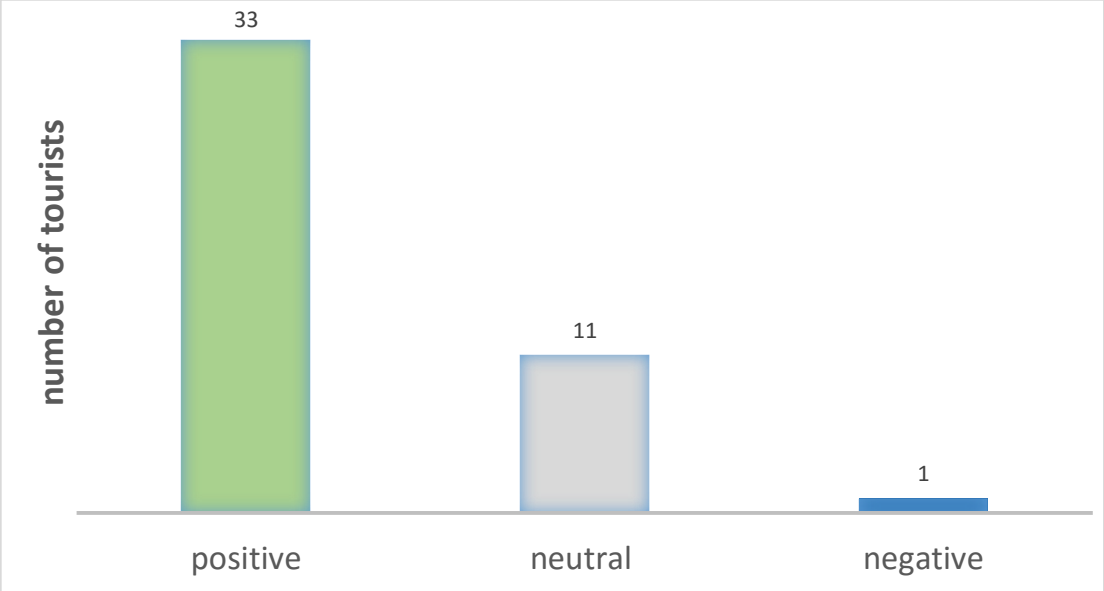

Figure 3. A number of positive, neutral and negative attitudes towards wind turbines in the combined interview sample.

Finally, as it turns out, none of the respondents have claimed that (s)he will cancel a trip because of the wind turbines presence at the destination. Similarly, none of them have ever openly opposed wind turbines construction or presence.

7.1.2 Reasoning

Here the term "reasoning" implies the individual's knowledge about a phenomenon and its attributes that could be generally described as "good or bad, desirable or undesirable, favorable or unfavorable" (p. 693, Waldo, 2012). After the initial coding (repetitive terms, states as is, or synonymous) I have identified 10 attributes of the wind power that satisfied "reasoning" criterion and reemerged as primary topics in the course of the interviews, grouping them into three large categories (***Table 1***). Attributes listed under Roman number have been often used as overarching concepts for the attributes listed under Arabic numbers.

Table 1. Cognition-related attributes of the wind power people have been mentioning most often and their positive and negative frequencies.

Attribute	Positive	Negative
I. Environment related	21	2
1. Non-emitting	12	
2. Sustainable	5	2
3. Future	6	
4. Better alternative	13	
5. Renewable	8	
II. Economically beneficial	6	
6. Inefficient		1
7. Independence from oil	2	

The importance of the wind power for the *environment* (I) had been the most popular reason brought up to justify wind turbines presence in the landscape. Elaborating on what "environmental" component is, tourists have mentioned climate change (couple from Ireland), compromise between growing energy demand and care for nature (woman from the US), Sweden showing positive example (man from Italy), long term agenda (man from Vietnam) and realized need for change (man from the US). *Sustainability attribute* (2) in some instances was understood as care for "future generations" (middle-aged couple for the UK) and realization of the "*future without oil*" (man from Australia) (3). Nevertheless, there were cases, when "environmentally friendly" have been coupled with statements, such as "it is not good to put them in the sea" (man from Spain) or "might harm birds" (man from India). Limited amount of emissions associated with wind power industry have been mentioned as a part of the perceived wind turbines life-cycle. In some instances "minimum emissions" attribute (also coined "clean" or "non-polluting") was linked to wind being a "natural" energy source , i.e. readily available, "here by nature and you can use it" (woman from Germany).

Quite a few people have contrasted wind power to coal or nuclear plants, concluding that wind harvesting is a much *better alternative* (4). Explanations varied for both industries. While fossil fuels were believed to "destroy our planet", via emissions and in the process of extraction (man from Germany), nuclear power was characterized by some as lethally dangerous for people (man from Spain). In its turn, wind power was rendered as both environmentally friendly in itself and a "nice" way to balance other alternatives out (man from Germany). Being *renewable* (5) – another frequently denoted attribute of the wind power – was used interchangeably with being an *alternative energy*

source by those tourists, who were elaborating on specific features of the wind industry, such as being a valuable part of the energy mix (man from Germany), ensuring long-term energy provision (couple from Chile) or lowering carbon footprint (woman from France).

Six tourists have mentioned potential *economic benefits* (II) that wind industry might bring, which implied saving money in the process of energy production (man from Canada). In two instances wind power sector have been characterized as *inefficient* (5) in terms of energy production and transport (women from Germany and Spain), but still ensuring some *protection from volatile oil market* (woman from Mexico, man from Australia) (6).

7.1.3 Feeling

Here the term "feeling" denotes emotions experienced in relation to the object or phenomenon and, ranging from being pleased to displeased, or from liking something to disliking (Waldo, 2012). In total, the respondents have been concentrating on 10 topics, summarized below as attributes outlining the affective dimension of their attitude (***Table 2***). Attributes were identified during the stage of initial coding (repetitive terms, stated as is, or synonymous) and grouped into three categories: related to visual attributes of the turbines (general aesthetics, including color/design/size, being interesting, modern, grouped or dispersed, fitting the area), audial attributes (noise) and general feeling they evoke (being overwhelmed, scared, relaxed). Attributes listed under Roman number have been often used as overarching concepts for the terms listed under Arabic numbers and Latin characters.

Table 2. The affective attributes of wind power people have been mentioning most often and their frequencies (positive and negative).

Attributes	Positive	Negative and neutral
I. Aesthetics	9	4 and 2
1. Physical properties:		
a) color/design/size;	3	5
b) clustering.	1	3
2. Fitting the scenery	2	3
II. Audial characteristics	1	5
3. Noise		
III. Emotions evoked		7
4. Overwhelming		3
5. Interesting	7	
6. Modern	2	
7. Relaxing vs. Scary	2	
IV. Curious	5	

Aesthetics (I) of the wind turbines was both an overarching concept, elaborated on more specifically using subtopics listed in the table, and a general characteristic used as is by quite a few tourists (15 out of 45). Many of those, who viewed wind turbines aesthetics as a positive have referred to them as "beautiful", "pretty", "nice to see", "good to look at" at etc. Simultaneously, those, who were negative or neutral, phrased their opinion as "turbines may not be very attractive" (man from Australia) or "can be a bit of a problem aesthetics-wise" (man from Italy). One American woman have said that she does not single turbines out as a unique landscape feature and barely notices them.

Specific physical properties (1) of the wind turbines, such as color, design or size were described by the respondents as something negative more often than positive. *Color* (a) was mentioned as something that could be changed, as well *design* (b), though only one person specified that making wind turbines "brown or green like a tree" could work better (man from Germany). Conversely, some of the other tourists have described wind turbines at their present state as "giant flowers on the plane" (woman from Australia) and "fading into the horizon" organically (two women from the Great Britain). Again, only one woman from the US pointed at the turbines *size* as a problem for vista.

The combination of wind turbines with the landscape in terms of *clustering* (b) – too many farms together – and *fitting the scenery* (2) was described in a variety of ways. Three people have stated that "a few big [turbines] are better" (man from Denmark), they "should not be concentrated" (woman from the US) and a lot of them "put … in one place" (man from Germany). Importantly, turbines were preferred to be viewed "not too close to historical sites" (man from the US) and somewhere, where they "do not interfere with a history of a place" (a couple from the US). Four times wind turbines were mentioned as a feature that can affect a city skyline in both negative (man from England: "disrupt[s] historical feeling of a place") and positive fashion ("part of the image of the city" (German man) and "form a beautiful skyline" (two men from Spain)).

Noise (3) was a single affective attribute pointed out by the tourists, which did not relate to the appearance of the wind turbines. It was mentioned as a major reason to put wind turbines in remote areas by all, but one tourist, who mentioned noise as a negligible disturbance factor.

Such a problem of the wind turbines as being *overwhelming* (4) has been raised quite a few times. People described turbines as either somewhat intimidating/disturbing when viewed up close – "when they are in your face" (couple from Ireland) – or overtaking the vista when there are too many of them. Saying that wind turbines look *interesting* (5) tourists usually implied a sense of "modern age" (woman from Germany) and "futuristic landscape" (man from Germany) turbines evoked, emphasizing the positive character of it (6). Or, in some cases, the turbines being a new phenomenon in itself (man from Hong Kong).

An equally small number of the respondents have acknowledged that they felt *uneasy* or *pleased* (7) looking at wind turbines. The former said that turbines could be "apprehensive if close" (English woman) or disturbing (woman from Finland), the latter used words as "beautiful, lovely" (couple from Ireland) or "relaxing, soothing" (man from Australia) and "peaceful" (woman from Australia).

7.1.4 Behavior

None of my respondents has stated that wind turbines might be the reason to cancel a tip. However, some people, who pointed out wind turbines as being *curious* for them (**Table *2***, IV), have also indicated that they would like to learn more about them, since they "do not have them back home" (a woman from Macedonia) or believe that industry in their countries is underdeveloped (a woman from France). A couple of tourists said they would be interested in guided tours as well (man from Australia, woman from France).

7. 2 Photo-simulation test

7.2.1 Sample description

Photos can elicit feelings similar to those people experience in a real landscape (Jacobsen, 2007) – a property I used in order to nudge tourists into elaborating more on their attitudes by drawing from visual clues only.

In total, 22 people (13 males and 9 females) from 14 different countries have participated in this additional phase of the data collection. Most of the countries have been represented by one or two tourists, only Spain by four and England – by three (***Figure 4***). The average age of the respondents was 34, with approximately the third being between 20 and 28 or over 40.

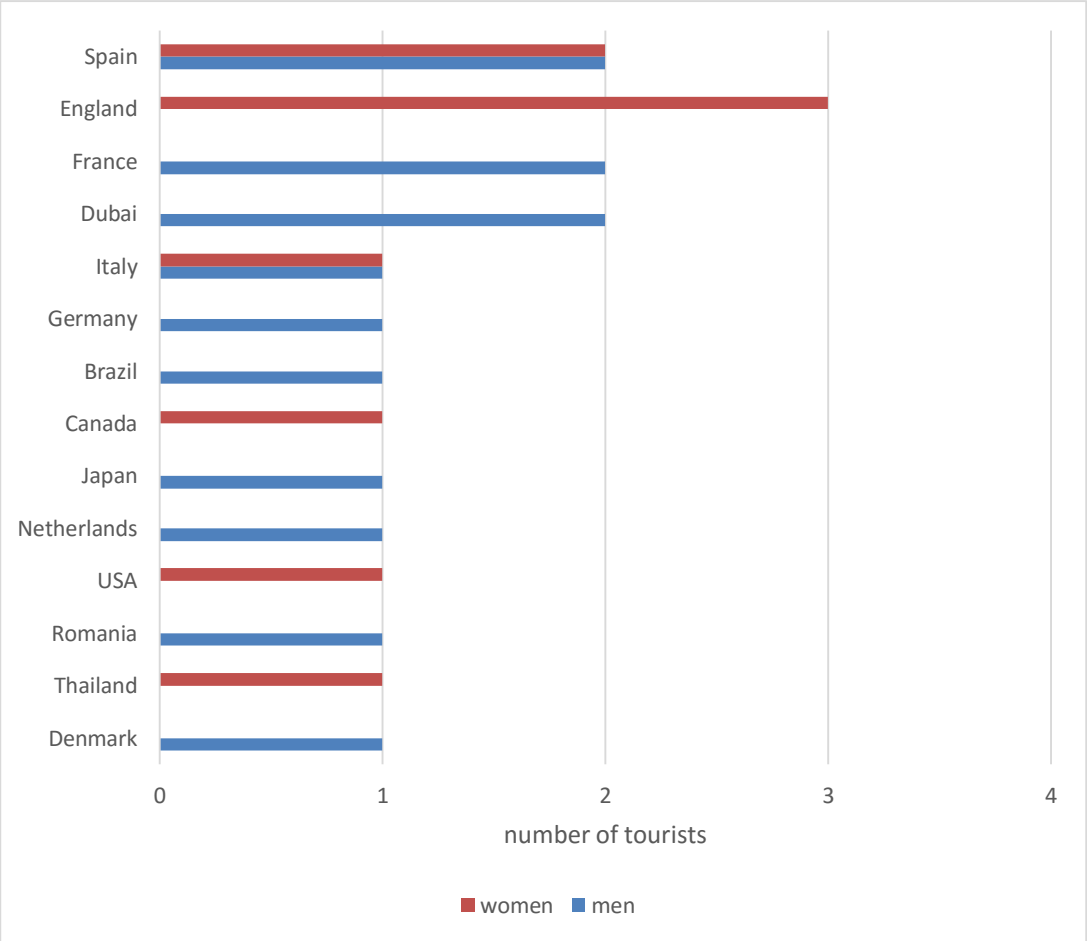

Figure 4. Nationality of the photo-simulation test participants and their gender.

Thirteen people (7 men and 6 women) have simply stated that the purpose of their trip was to see a Swedish city. Some were more specific, saying that they wanted to experience local culture and meet people (5 responses), learn about the history of a place (4) and see unique architecture (10). Five tourists have claimed that they prefer some sort of a natural sight. In such a way, my sample suits the

aim of the research, since it consists primarily of tourists interested in socio-cultural aspects of the destination.

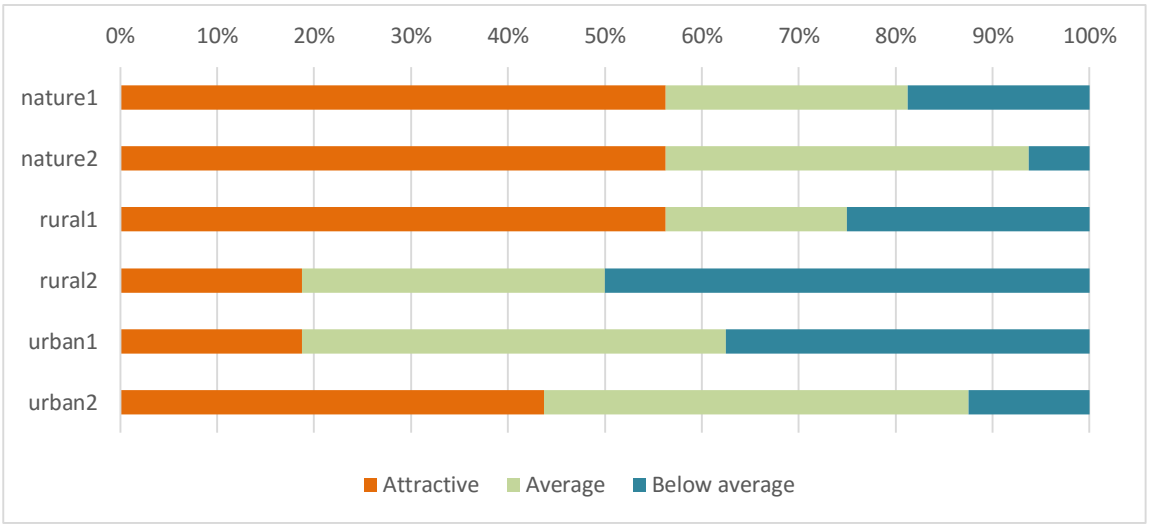

Figure 5. Illustrates how often tourists considered natural, rural and urban landscape, depicted on the photo, appealing, average or possessing below average attractiveness.

Images without wind turbines, depicting natural landscape (nature1 and 2), were considered attractive 3 – 9 times more often, than being "below average". Similarly, one of the pictures showing a row of four-storey houses (urban2) – presumably urban landscape – has been pointed out as being attractive three times more often than non-attractive. Results for rural settings were ambiguous: people found them both appealing and unappealing, depending on the picture. Strictly urban environment has been marked as unappealing two times more frequently, than as pleasing. Interestingly enough, the picture of the natural landscape showing seashore (nature2) has been also picked as average seven times (almost as much, urban1 and 1) (***Figure 5***).

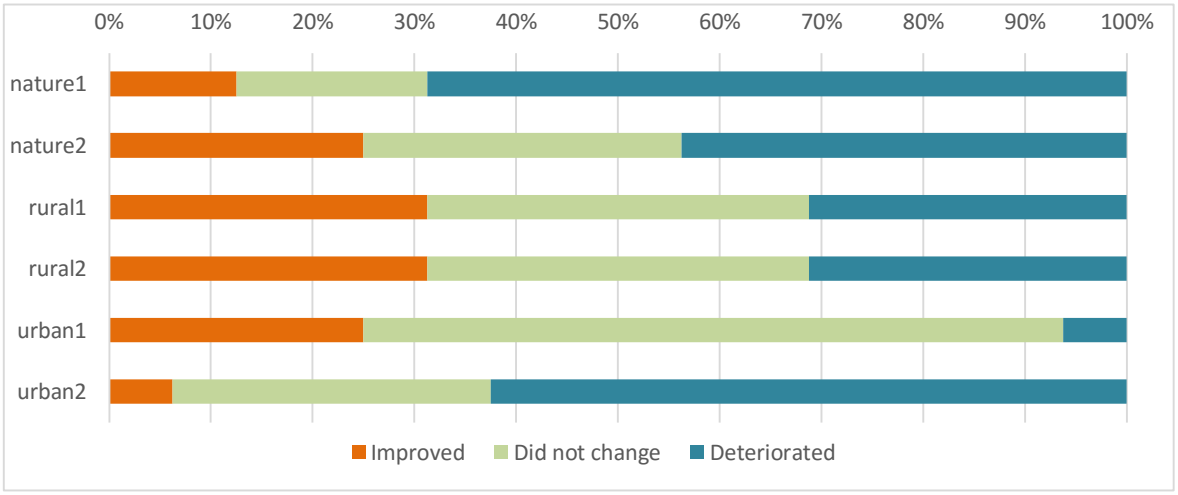

Figure 6. Frequencies of different opinions (improved, stayed the same, deteriorated) the tourists expressed towards images depicting wind turbines in the natural, rural and urban landscapes.

Respondents claimed that images capturing natural environment were affected negatively by wind turbines presence 2-5 times more often, than they were believed to improve. Ambiguity in the estimation of rural settings persisted: pictures were either shown to remain the same or, with almost equal frequencies (4 and 5 times), oscillated between better and worse. Conversely, urbanized area (urban1) was seen as winning aesthetically from wind turbines presence (by 10 people) or, at least, remained unchanged (11 people) (***Figure 6***).

Similarly to the tourists, who have participated in the first two stages of the data collection, none of the participants of the photo-simulation test have ever openly opposed or complained about wind turbines development or presence.

7.2.2 Test results

The replies given were primarily aesthetics/noise related (18 answers), in other words, affective component dominated in the conversation (***Table 3***). Only two people mentioned arguments rationalizing reported attitudes briefly.

Table 3. The cognitive (C) and affective (A) attributes of the wind turbines tourists have been mentioning most often and their appraisal.

Attributes	Positive	Negative
I. Aesthetics (A)		14
1. Color		1
2. Design		1
3. Modern	1	
II. Environment (C)		
1. Sustainable	1	
2. Non-emitting	1	
III. Beneficial (C)	1	
IV. Better alternative (C)	2	
V. Noise (A)		4

The tourists presented with images of wind turbines embedded in different landscapes (natural, urban, rural) in their answers have been concentrating primarily on *aesthetics* (I) of such a combination. In particular, photos featuring nature have been criticized using statements like: “nature is better to stay turbine-free” (man from Denmark) and “left alone” (woman from Thailand), wind turbines “distract

from admiring the nature" (man from Netherlands) or act as "visual pollution of a place" (man from Brazil). Offering solutions, people told me that wind turbines must be placed in the areas, where they would "not make things worse" (woman from Thailand) or "interfere with the landscape" (man from Romania), such as planes (as opposed to woody land (woman from Canady) or mountains (man from Netherlands)). Interestingly, seaside have been pointed out as both unsuitable (couple from Spain) and fitting (two men from Dubai) for wind turbines placement.

The opinions on how well wind turbines combine with the rural landscape diverged. Some tourists saw them as something that will disrupt "the flavor of" (woman from the US) or "distract from the country" (man from the Netherlands), even if they bring benefits for the community (man from Denmark). Some agreed that wind turbines could potentially be placed next to buildings and houses (woman from Canada, men from Dubai, man from Brazil, two men from France). City was mentioned by only one couple (from Spain), who emphasized it as a type of a landscape not much affected by wind turbines. *Environment* (II) had been mentioned in this test only two times, in the context of the wind power being "sustainable", "non-emitting" and "natural".

Wind industry have been also compared to fracking (woman from the UK), nuclear energy and fossil fuels (man from Germany) as both a more favorable *alternative* (III) and a reminder, i.e. example of the better options.

Only once a man from Denmark made a remark on wind turbines being good for the community, stressing their "clean" way of energy production. There were even somewhat poetic examples, such as: "next to the houses, where they are using this energy, [turbines] look more like energy farms, rather than ordinary farms" (man from Germany).

Finally, noise was recalled as an issue by a man from the Netherlands, who called this attribute a reason for placing wind turbines in remote areas. Another man, from Brazil, have similarly claimed that he will not "feel comfortable nearby".

8 Analysis and discussion

8.1 Interviews discussion: reasoning and behaviour

The positive environmental role of the wind industry was stressed by a half of the respondents. Such a frequent use of this argument shows its undeniable popularity, coupled, nonetheless, with a few implicit contradictions. For example, in the course of the interviews wind industry was recognized as "sustainable", "alternative" or "renewable". At the same time wind power facilities admittedly harm biodiversity – an issue no one attempted to reconcile with previously stated positive attributes or admit as a trade-off.

An insistence on importance of the wind power for the global environment as a factor justifying its facilities presence in recreational landscape is a separate and important component that lies outside of the destination commodification (tourists being only consumers of the landscape) presumption, stressed by Broekel and Alfken (2015). In my case, the visitors of Skåne were considering public interest (acting on their role as citizens) and taking ethical stance, which ascribed higher importance to the group beliefs and needs, rather than individual desires (Ek, 2005).

Description of the wind power as a "better alternative" draws upon it being a "green" solution, or, rather *"greener*", than the rest. This comparison puts an emphasis on the perceived inevitability of the humanity's growing energy demands, which should be satisfied at certain, preferably, lesser costs for the environment. At the same time, this demand was not problematized by any of the respondents and, thus, not recognized as a possible problem in itself (Kates et al., 2000).

Some of the respondents have claimed that renewables (including wind power) ensure some independence from volatile oil market prices, an argument which has not been brought up before as "the most prominent wind farm belief" (p. 26, Shepherd, 2011), but in my research seem to overshadow the claims of inefficiency, widely discussed in the literature (Decarous and Keith, 2001).

Considering wind farms as a potential tourist attraction, previous studies have reported that visitors were exhibiting more interest, if wind turbines were a relatively new phenomenon in their own country (Frantál and Kunc, 2011). My respondents have conformed to this observation, as those, who expressed the desire to visit a wind farm, have also emphasized that they are unaccustomed to viewing turbines back home (Australia, France, Macedonia, Turkey, for one exception – USA). Wolsink (2007b) have noted that locals tend to become habituated to wind farms some time after the construction is finished. It might be hypothesized that this habituation might also result in a general loss of interest after the number of wind farms and countries adopting the technology increases. Wind farms currently

on display (in the US, Canada, China, UK and other countries) try to reestablish and build this interest by offering guided tours and even an opportunity to climb a windmill (Green Britain, 2016).

8.2 Interviews discussion: feeling

Aesthetical concerns have been previously pointed out as a number one reason for negative attitudes towards wind turbines (Review by Bergek, 2010). Nevertheless, sentiments expressed by the respondents in my research have been ambiguous at this account. Tourists were both positive and negative apprising aesthetics of the wind turbines as such (namely color, design, size, clustering) and emotions they provoke (being overwhelmed, relaxed, interested, scared etc.).

"Existing empirical studies have indicated public support for turbines that are painted neutral colors and merge with the landscape" (p. 128, Devine-Wright, 2005). In my study, though, more organic/traditional look that masks turbines as artificial entities, was deemed preferable by some, while others have claimed that turbines look organic enough already and fit any scenery.

Though only one person in my study has explicitly complained about wind turbines being too big, the issue of clustering (many turbines together) was raised repeatedly. General preference for smaller clusters was prevailing. The tourists claimed to feel overwhelmed, when observing turbines from the short distance, stressing that the growing number of wind turbines in general could be burdensome, taking up attention from the scenery. This latter point is especially interesting, since it could be signaling the existence of a saturation point, beyond which the positive attitude, reported by the majority of the participants in my study, might change (Waldo, 2012).

The repellent sound, produced by the air flowing through the blades, has been recognized before as the second (after aesthetics) most common attribute that has a negative impact on people's attitude towards wind turbines (Shepherd, 2011). My findings were consistent with this observation, as some of the respondents offered to put wind turbines farther away from human settlements into, for instance, industrial landscapes, as a potential compromise.

8.3 Photo-simulation discussion: feeling and reasoning

Though the participants of the photo-simulation stage have mostly claimed that they have come to Skåne to experience local culture, they still found close-to-natural landscape depicted on the image to be more attractive than rural or urban scenery. On the top of it, they were more negatively predisposed towards wind turbines in such a landscape (for the exception of the "urban2" image, see *Limitations*), than those tourists who did not see photos and only did an interview. People's decisions on how well wind turbines fit different types of a landscape (natural. urban and rural) seem to be aligned with previously described spectrum, where urbanized areas were found to be more suitable for wind power development than nature areas, while opinions on rural land were ambivalent (Wolsink, 2007a).

The language tourists used to convey both negative and positive stance during photo-simulation test was also more expressive. For example, such terms as "visual pollution" or "visual impact", recalled by some of the respondents, were also frequently used in scientific literature, giving negative predisposition away. It could have been largely avoided, if more neutral or positive terms (e.g. "visual enhancement") would have been used (Devine-Wright, 2005).

8.4 Assigning value

As I have noted above, **values** (aesthetic, material and ethical) are principles or standards that emerge within established groups, reflecting these groups' major life goals and general behavioral modes, thus, being a base for object specific attitudes (Bergman, 1998). It is up for debate, whether this means that values expressed by the respondents in my research could be extrapolated on the majority of Skåne visitors. At the same time, since my sample included people of different age, gender and nationality, but certain repetitive patterns still emerged in their answers, it might be argued that these patterns are persistent across diverse groups of "transient stakeholders" represented and might be associated with similar values.

According to Waldo (2012), from an ethical point of view wind power could be seen "as environmentally good, since it leads to reduced emissions of greenhouse gases, or as a threat to birdlife and fisheries" (p. 694). In my interviews values associated with ethical stance were dominant and primarily involved care and responsibility for the Other (both human and non-human, living now or in the future), showing "good example", realization of the mistakes and need for change. The picture, however, differed for those people, who were presented with images of different landscapes with wind turbines edited into them. Now aesthetic values, associated with individual perceptions of beauty

and place attachment (Devine-Wright and Howes, 2010), were prevailing. People were primarily concerned with the dissonance ("visual pollution") industrial facilities introduce into close-to-natural landscapes and insisted that such areas should be rid of such an intrusion. However, when the participants of my research spoke about turbines in urban and rural landscape, the values reflected were reminiscent of what Waldo (2012) defined as material values – "possible economic gain through energy production or job opportunities, or concerns about potential economic losses of wind power, such as decreased property values or reduced attractiveness for local tourism" (p. 694, Waldo, 2012). At that point tourists described wind power as inefficient in terms of energy production and transport, but at the same time as a way of saving money and elevating dependency from fossil fuels.

9 Implications of the research for sustainable development

The framework of sustainable development is dynamic and multidimensional. It incorporates concerns for environmental protection and improvement of environmental health with goals of economic and social development. All three components form a complex network, understanding of which is a prerequisite of our ability to grasp (and, possibly, affect) the behavior of nature-society systems, with all of the conflicts and successful synergies within it.

One of those conflicts – a clash between environmental pillar (wind power) and its social aspect (tourist experience) – is central to my study. To improve our capacity to navigate along sustainable path, we need to know which rules, information and norms could do it most effectively (Kates et al., 2000) and in a "socially acceptable manner" (Kolonas, 2007). Here, on the example of interactions between wind power industry and tourism, I have illustrated the prevalence of negative feelings when tourists describe their attitude towards turbines in the vista, and dominance of arguments "in favor" when they refer to wind power development in general. The revealed clash is consistent with DEVA attitude – the realization of importance of certain mitigation steps, but emotional rejection of turbines in the landscape. This stance, though related to NIMBY, should be clearly distinguished from it, as the latter implies unwillingness to accept the development in a local area, while the former describes unwillingness to accept it in an unfamiliar, remote and, potentially, exotic landscape. People exhibiting DEVA attitude may not even insist on NIMBY. If the landscapes they live in are undistinguished, they do not mind wind farms being visible from their houses, but object them at a favorite resort (Shepherd, 2011). I must note that the same participants of my research, who did not appreciate wind turbines in the natural landscape, have claimed that they do not mind turbines in the vicinity of a city they came

to visit. Thus, that DEVA attitude might not be observed in certain types of tourist landscapes – in particular, urbanized area – a fact that could be considered by local decision-makers in the course of wind power projects planning.

Though the majority of studies, that involved estimations of potential losses by tourism industry from wind power projects implementation, have detected a definite, albeit small, possibility of the losses (Riddington et al., 2010), my study did not harvest similar results. Tourists interested in cultural/social aspects of a destination (i.e. visiting a city), did not consider cancelling a tip despite wind turbines presence in the area. Under certain conditions (see *Limitations*), these results might hint at a compromise that allows environmentally sound solutions be in concert with social demands (for example, putting turbines in industrial areas of the city). Of course, other aspects, such as "intimidating view" of wind turbines and noise they produce, might prove restricting for such a neighborhood. For instance, tourists in my study claimed that they would be dissatisfied with their visit if wind turbines were too prominent at their destination. In order to help it, decision makers might take into account that tourist prefer smaller wind farms to large-scale ones and could possibly remain tolerant up until a certain saturation point, after which wind farms might influence their decision to come. In addition, though wind power facilities are often placed in rural areas for the purpose of economic development and modernization (de Sousa and Kastenholz, 2015), my study have confirmed that this practice should be avoided in case of unique cultural and historic locations. At the same time, if turbines are placed in already changed environment, destination promotion organizations might take advantage over such a revitalization of a site and stress "futuristic" character of it as an attractive tourist feature. Finally, since the signs of habituation to wind turbines could follow the process similar to one that made the Eifel Tower, extensively criticized at first, a part of the tourist image of Paris later, the level of acceptance might grow in time naturally (Gipe, 1995).

10 Synthesis and Conclusion

Only one participant in the entire sample of 61 have claimed that he was against wind turbines presence at his destination, while the rest of my respondents were predominantly positive or, more rarely, neutral towards them, considering wind turbines an insufficient reason to cancel a trip. In addition, during photo-simulation test, when the perceived impact of the wind turbines on rural, urban and natural landscapes was discussed, it was also found that changed landscapes (rural or urban) were prioritized for wind turbines placement. With caution, these findings could be considered a preliminary

indication of a greater tolerance towards wind turbines that foreign visitors, interested primarily in culture, architecture, people or history of a place demonstrate (see *Limitations*).

During the first two stages of my research (interviews), each tourist tended to slip from the topic of wind turbines to the significance of the wind industry in general. During the third stage (photo-simulation), the respondents had much more focus and retained the subject, having the photo in front of them. At that, discussing wind power industry, tourists were primarily positive and resorted to logical arguments, while, discussing wind turbines, tourists were ambiguous or negative and used affective statements. This observation conforms to the previous finding of "public attitudes towards wind power [being] fundamentally different from attitudes towards wind farms" (p. 1188, Wolsink, 2007b) and DEVA (Double Edged Visitor Attitude) stance (Shepherd, 2011).

Positive arguments tourists brought up included wind energy significance for the environment and economy (arguments founded in ethical and material values), as well as tourism industry itself. At the same time affective component concerned aesthetics (both ambiguous and negative judgements), noise and feelings wind turbines evoked. This result is congruent with previously noted opposition of aesthetic (the desire to preserve an ''untouched'' local site) and ethical values (the desire to reduce impacts on the climate) in attitudes of locals towards wind power projects (Waldo, 2012).

My research confirmed that tourists prefer smaller wind farms remote from places of historical significance, while turbines placed in areas otherwise changed by human activity might improve landscape attractiveness and create "a futuristic landscape", appreciated by some of the tourists. This information could be of potential importance for local decision-makers and destination marketing organizations.

11 Limitations

The narrow focus of my research inevitably omits certain issues or overlooks quite a few associated cause and effect links. For example, destination marketing organizations might promote Skåne in a way, which portrays wind turbines as an organic landscape feature, naturally woven into the image of the area. Thus, tourists, coming to see it, might already expect and acclaim a certain sight, while those, who do not welcome it, chose to avoid coming at all. The important role of commercial photographs in constructing and communicating "place-myths" that shape and reshape destination perceptions and, therefore, decision-making process, via projecting desired destination images on perspective

tourists for consumption has been proved before (Kim and Stepchenkova, 2015), but never studied in relation to wind turbines.

The opinions of 60 people who had unanimously accepted (with more or less enthusiasm) wind power development at their destination is not big enough of a sample to draw a confident conclusion on tolerance towards wind turbines that foreign visitors, interested primarily in culture, architecture, people or history of a place demonstrate. In some of the quantitative studies of the tourist attitudes done in the past the number of respondents was reaching hundreds (Review in Riddington et al., 2010). Nevertheless, even small samples possess "a predicative value and can be used to deduce certain generally true verdicts from them" (p. 516, Frantál and Kunc, 2011). In addition, my research was aimed at qualitative in-depth investigation of what people have said and took advantage over a method similar to that of Waldo (2012), who have interviewed 40 local stakeholders in Sweden, but still harvested enough data for comprehensive analysis.

I did not ask tourists what their previous experience with wind turbines was and got hold of this information only if they stated it themselves. Later on, when I wanted to link their interest towards wind turbines with previous encounters (habituation), the lack of background data on the number/length of such encounters proved to be a limiting factor, undermining validity of such a connection.

Two main criteria guided the choice of photos to represent urban, rural and natural settings in the photo-simulation test: the number of human artifacts and their quality. The larger the number of the artifacts was, the more "urbanized" an image was considered. Similarly, tall, multi-storey buildings were more likely to represent a city rather, than a village. A picture with row-houses (image unban2 see ***Appendix A***) satisfies both criteria and, simultaneously, does not depict a single natural element. Nevertheless, it cannot be called an "image of urban area" with certainty, since it lacks all of the infrastructure, usually depicted on such photos. Thus, the results, harvested with the help of this particular photo cannot be attributed to an urban environment with confidence.

Interviewer bias – involuntary hints that the interviewer gives to an interviewee, conveying messages that could influence the outcome – is problem that every interview based research faces (Bryman, 2012). Though, I tried to limit my interference into people's speech to questions like "could you elaborate on it?" or "what do you mean by that", I still cannot exclude my influence on them. For example, giving a response to me, the researcher, they could have been expressing an opinion, which was expected of them, rather than being sincere (Schwarz, 1999). In addition, some of the tourists did

not speak perfect English, so sometimes I was forced to reinterpret their words that could have skewed the results at several occasions.

During both stages of the interviews coding I have tried to limit possible bias and group attributes tourist repeatedly denoted as is or looking for close synonyms (for instance, “clean” was linked to “non-emitting”), nevertheless, it is possible, that I could have overlooked or misinterpreted some of the issues mentioned. This bias is normally corrected for by having at least two coding researchers to work with the initial data (Charmaz, 2006).

Reflecting on the data collection process, I would advise reiteration of the research with longer interviews and use of photo-simulations with all the respondents, not just a fraction of them. This will possibly allow for even greater in-depth and, among other things, identification of topics consistently omitted. For example, in my study, the respondents have skipped the issue of subsidies still required by the wind industry and controversy surrounding it, such as: whether or not the financial support is still necessary and if so, what form it should take, or whether or not real estate prices drop due to wind project presence in the area. However, these omissions could have been the result of the interview time limits and I refrained from bringing them up in the discussion.

Though benchmark minimum of the interviews required for the research was 40 (analogous to Waldo) and my sample had 61, I still could have collected more in a tourist season. However, I was gathering data in February and March and had to spend most of the time waiting for my respondents, rather than interviewing them. This could have been avoided if I gathered data later in spring or summer, when, according to *Turistbyrån* employees, the number of visitors of Skåne is the greatest.

12 Future research

Though my study shows that cultural tourists (as opposed to nature tourist) are indeed more tolerant towards wind turbines at their destination, a small number of participants makes this induction somewhat uncertain. In order to answer such a question more or less unambiguously a larger sample is required. Since a simple quantification of positive attitudes of culture tourist in this case could be sufficient, a quantitative, not qualitative approach is advised as a tool of choice for continued studies. For example, short questionnaires, as opposed to interviews, though unable to capture the subtleties of peoples’ preferences, still allow for a bigger set of collected data. The exact number of samples

necessary for such a study, according to previous reports (see review in Riddington et al. (2010)), might vary between hundreds and thousands – a quantity beyond my qualitative research feasibility.

In my analysis, I have concentrated on three components that constitute tourist attitudes (feelings, emotions and intentions, defined by values). The future research might extend and amend my findings by looking into the process of those components formation. As Frantál and Kunc (2011) have pointed out, "there is a need for more in-depth qualitative research to better understand the process of the *construction* of individual attitudes and to explain the divergence between positive general attitudes and actual oppositional behavior" (p. 516). This study might take advantage over the tools of constructivism or post-structuralism, which did not fit into the empirical approach I employed. These tools are deemed more suitable for the analysis of the process, by which people actively interpret or create their own subjective representation of objective reality (Jonassen, 1991).

As special case of the attitude-affecting factor I have already mentioned destination marketing organizations that might shape expectations and attract visitors with certain anticipations by promoting Skåne in such a way that renders wind turbines as a feature inseparable from (or on the contrary – undesirable in) the Swedish tourist landscape. Future research might explore this niche deeper, also taking into account that with the advent of Web 2.0 and user generated content – social networks and sharing platforms – the opportunity to shape expectations is largely delegated to sources beyond the control of commercial stakeholders. Coupling the studies of how wind turbines are depicted in messages that have been produced by destination marketing organizations with scrutiny of independent sources that currently include not only of messages from news or popular culture, but also stories of other tourist and residents of the area, it is possible to palpate how perceptions of visitors might be reshaped and reinforced (Kim and Stepchenkova, 2015). It is also important to note that both sources (commercial and independent) are known to be locked in a mutually reinforcing loop of a so-called hermeneutic circle of representation, a phenomenon of seeking "to gaze upon items that conform to the representations of places and cultures [tourists] have internalized from home, and then record them (typically with their cameras), thus replicating and reinforcing extant perceptions" (p. 8, Caton and Santos, 2008). In such a way not only contrast, but congruency could be traced in both and change induced in of one sources will potentially lead to change of the other, signaling also a predisposition shift. Since, as some marketing literature suggests, studies aimed at identification of certain attributes depicted or avoided on photos are of interested to and used for destination positioning (Kim and Stepchenkova, 2015), wind power industry might take advantage over this fact and use such promotion for improving negative attitudes in the areas where they are observed.

Since some of the respondents in my study have described wind turbines as a potential tourist attraction, the perspectives for “energy tourism” development in Skåne should be investigated further. As a sector of industrial tourism, which includes visits to former, retired or regenerated industrial sites, as well as still operational facilities, such tourism “provides outdoor activities in unusual and visually outstanding energy landscapes, increases the general public's energy literacy by raising awareness about the environmental cost of the energy we all use, and it motivates people to think about and make appropriate energy-related choices to tackle current energy challenges” (p. 13, Frantál and Urbánková, 2014). Thus, its positive role in strengthening energy-tourism nexus is undeniable, though, currently, largely neglected in scientific literature. Future research might elucidate specific strategies of energy tourism on the example of wind energy facilities, as well as its particular input into the smoother transition towards sustainability.

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10 Appendix A

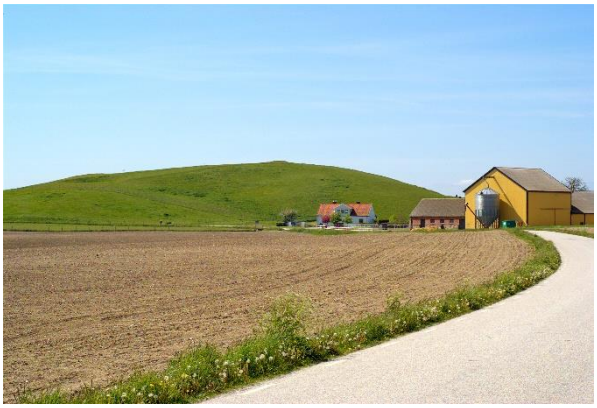
Photos of natural, rural and urban landscape (originals).

Nature1

Nature2

Rural1

Rural2



Urban1

Urban2

11 Appendix B

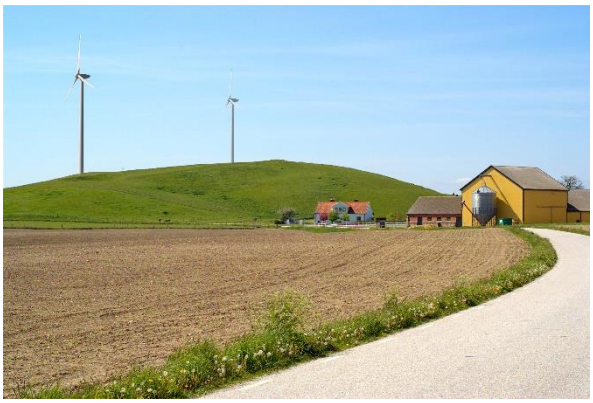
Turbines in natural, rural and urban landscapes (edited photos).

Nature1

Nature2

Rural1

Rural2



Urban1

Urban2